

claims.

WHAT IS CLAIMED IS:

1. A heat pipe, comprising:

a pipe container; and

a fiber wick structure arranged on an inner wall of the pipe container,

5 the fiber wick structure including first and second fibers with different melting points;

wherein a melting point of the first fiber is higher than a sintering temperature of the pipe container and a melting point of the second fiber is lower than the sintering temperature of the pipe container;

10 whereby when the fiber wick structure is manufactured in a sintering process, the first fiber provides a support force for the fiber wick structure adhered to the inner wall of the pipe container, and a surface of the second fiber is melted in the sintering temperature of the pipe container, thereby adhering the fiber wick structure on the inner wall of the pipe container.

15 2. The heat pipe of claim 1, wherein the fiber wick structure is made of a screen mesh.

3. The heat pipe of claim 1, wherein the fiber wick structure is made of a spiral fiber bundle.

20 4. The heat pipe of claim 1, wherein the first fiber and the second fiber of the fiber wick structure are alternately woven with each other.

5. The heat pipe of claim 2, wherein the second fiber is arranged in a warp direction of the fiber wick structure of the screen mesh.

6. The heat pipe of claim 2, wherein the second fiber is arranged in a weft direction of the fiber wick structure of the screen mesh.